

To: Director and Laboratory Staff  
From: Survey and Appraisal  
Subject: SURVEY NOTES

## F A R M   S I T U A T I O N

### ECONOMIC ACTIVITY IN THE NATION CONTINUES TO DECLINE

Economic activity in the Nation continues to decline. Since the beginning of the year, average wholesale prices of farm products, foods and industrial commodities have each declined about 5 percent. In the first six months of 1949, cash receipts from farm marketings totaled 6 percent less than in the first half of 1948, with farmers' net income probably down somewhat more. If weather conditions are favorable, prices of farm products are likely to average somewhat lower over the next few months, due to the generally large 1949 crops now in prospect.

Most economic indicators continued to point downward in May and June. Since February, the level of industrial output has declined at the rate of about 3 percent a month. Non-farm employment dropped one-half million between March and May and in the latter month was more than a million lower than a year earlier. Consumers' incomes, which have been supported by unemployment insurance benefits, have declined less than half as much as industrial production.

The Demand and Price Situation, June 1949, p. 1.

## C O T T O N   L I N T

### COTTON CONSUMPTION SLIGHTLY HIGHER IN JUNE

Cotton consumption was slightly higher in June. For each month since April, cotton consumption has been in the neighborhood of 600,000 bales. Based on eleven months reported data, it is estimated that the 1948-49 cotton consumption will be between 7.8 and 7.9 million bales, as compared to 9.3 million bales consumed during the 1947-48 cotton year. Spindle activity picked up slightly during June.

Table 1.- Cotton consumption and stocks, and spindle hours in cotton mills

	: June	: May	: April	: June
	: 1949	: 1949	: 1949	: 1948
Consumption, bales.....	600,495	580,078	597,031	801,142
On hand, 1000 bales.....	5,465	6,357	7,320	3,415
Active spindle hours, billions....	7.5	7.4	7.4	10.3
Spindle activity, percent of				
80-hour capacity 1/.....	95.8	93.8	97.9	130.9

1/ Includes activity on fibers other than cotton, totaling 0.3 to 0.6 billion spindle hours for each month shown.

From Census reports.

### PRICES OF RAW COTTON AND CLOTHS AND MILL MARGINS CONTINUE TO DROP

Delivered-at-mill cotton prices continued to drop during July, while rayon staple remained stable. The equivalent price of viscose staple rayon was 1.77 cents per pound cheaper than Middling 15/16-inch cotton. Cloth prices (average of 17 constructions) and mill margins dropped slightly during June.



Table 2.- Prices of raw cotton, rayon staple and cotton fabrics,  
and cotton mill margins in cents.

	: July 22 : : 1949 :	June : 1949 :	May : 1949 :	April : 1949 :	June 1948
Cotton, Middling 15/16"	:	:	:	:	:
delivered at mills, lb.....	33.81	34.37	34.43	34.76	38.53
Rayon, viscose staple	:	:	:	:	:
equivalent price 1/, lb.....	32.04	32.04	32.04	32.93	32.04
Rayon, acetate staple	:	:	:	:	:
equivalent price 1/, lb.....	37.38	37.38	37.38	37.38	42.72
Cotton fabrics, average 17 constructions,	:	:	:	:	:
Price for cloth from 1 lb. of cotton 2/..	-	60.22	61.27	62.56	81.83
Mill margins 3/.....	-	27.75	28.76	29.93	45.34
Sheeting, 37" 4.00, yd. 4/.....	15.50	15.50	15.50	16.00	17.30
Osnaburg, 36" 2.35, yd. 5/.....	19.00	19.50	20.00	20.38	23.13
Printcloth, 38-1/2" 5.35, yd. 4/.....	13.00	13.00	13.19	14.75	18.56

1/ Cost to mill of same amount of usable fiber as supplied by one pound of cotton (rayon price x .89).

2/ Price of approximate quantity of cloth obtainable from a pound of cotton with adjustments for saleable wastes (Cotton Branch, PMA).

3/ Difference between cloth prices and prices (10-market average) of cotton assumed to be used in each kind of cloth (Cotton Branch, PMA).

4/ From Daily Mill Stock Reporter.

5/ From Daily News Record.

#### USDA ESTIMATES COTTON ACREAGE AT 26.4 MILLION ACRES

The first cotton acreage estimate of the year was issued by the Department of Agriculture in early July. It was 26,380,000 acres, or an increase of 14.2 percent over last season.

Cotton Trade Journal, July 8, 1949, p. 1.

#### UNITED STATES ACCOUNTS FOR 46 PERCENT OF WORLD'S PRODUCTION, 33 PERCENT OF WORLD'S CONSUMPTION DURING 1947-48

During the 1947-48 crop year the United States accounted for 46 percent of the world's cotton crop and 33 percent of the world's cotton consumption, as compared to 39 percent and 23 percent respectively during 1938-39. Later figures reveal that the United States produced 51 percent of the world's cotton crop during 1948-49. Total world cotton production during the 1948-49 year was about one million bales lower than the 1938-39 year. World cotton consumption was 28.7 million bales during 1947-48, or about 1.7 million bales lower than the 1938-39 consumption. (See table 3).

#### INTERNATIONAL HARVESTER COMPANY IMPROVES THEIR COTTON PICKER

The International Harvester Company has improved its cotton picking machine by a change in the spindle, which is expected to increase its durability and lower replacement costs. The spindles have a harder surface and are barbed more uniformly. The chrome surface on the spindles will be thicker and harder, increasing its resistance to wear. The surface foundation will have improved case



Table 3.- Production and consumption of cotton by leading countries, for specified years

Countries	Production				Consumption			
	1938-39:	1945-46:	1947-48:	1948-49:	1938-39:	1945-46:	1947-48	
	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
	<u>Bales</u>	<u>Bales</u>	<u>Bales</u>	<u>Bales</u>	<u>Bales</u>	<u>Bales</u>	<u>Bales</u>	
	:	:	:	:	:	:	:	
United States....	11,617	8,852	11,658	14,700	6,858	9,163	9,354	
Russia.....	3,800	1,700	2,600	2,400	3,809	1,600	1,900	
India & Pakistan..	5,151	3,609	3,410	2,815	3,436	4,124	3,805	
China.....	2,301	1,820	2,150	2,120	3,295	1,850	2,950	
Egypt.....	1,692	1,082	1,320	1,780	121	218	203	
Brazil.....	1,989	1,350	1,215	1,470	642	875	843	
United Kingdom...	-	-	-	-	2,690	1,611	1,934	
France.....	-	-	-	-	1,295	747	1,092	
Other countries..	2,970	2,634	2,818	3,405	8,325	4,367	6,697	
• Total world...	29,520	21,047	25,171	28,690	30,471	24,555	28,778	
	:	:	:	:	:	:	:	

From Cotton Quarterly Statistical Bulletin, International Cotton Advisory Committee, Washington, D. C., June 1949, pp. 5-7.

hardening and the core will be stronger. Their mechanical cotton picker has 600 spindles, and any increase in spindle durability would reduce the mechanized farmer's replacement costs substantially.

Cotton Trade Journal, July 15, 1949, p. 6.

#### COTTON TEXTILE INDUSTRY AND EQUIPMENT

##### YARN: INVENTION OF SIMPLE SPINNING DEVICE CLAIMED TO PERMIT MANUFACTURE OF FINER YARNS FROM SHORT STAPLE U.S. COTTON

It is claimed that the Hegemax, invented by E. Hegedus, of Switzerland, will increase production, reduce thread breakages, and increase spinning speed. Mr. Hegedus found that the greatest strain on ring-frames was reached between the last roller and the ring-traveller. Short staples or poor cotton may pass all right, but their weakness shows up in the last phase of spinning. The thread-guide on top of the balloon was replaced by a lever, giving a preliminary twist to the drafted sliver (between the delivery rollers and the Hegemax turbine). Tension is reduced by some 40 percent. Installation is said to be very easy, and the Hegemax can be used on any type of standard ring-frames. Tests by European mills revealed the following: (1) production is increased by an average of 20 percent; rings of larger size (diameter) installed, (2) spindles run at an added speed of 10 to 24 percent, hosiery twists being spun at normal speed, (3) thread breakages are reduced 66 percent with each worker attending 25 percent more spindles, and (4) breaking strength increased 5 percent and elasticity boosted 7 to 10 percent. One of the most important developments is that the spinner may buy shorter staples and get yarn of the same standards. His spindles will run at soft twists for delicate hosiery.

Cotton Trade Journal, July 8, 1949, p. 1.

##### INCREASED PRODUCTION CLAIMED FOR NEW SPINNING MACHINE

In Switzerland, Nastrofil is a new method of spinning that cuts out use of the flyer-frames and also simplifies drawing. Under this new set-up cotton goes,



after carding and drawing, to the ring-spinning frames, where it gets additional drawing and is directly spun. Using this method is found to increase production about 10 percent, while spinning time is shortened by about 20 percent according to type and count. Also, it was found that 50 percent or more labor is saved by this machine.

Cotton Trade Journal, July 1, 1949, p. 10.

## COTTON PRODUCTS

### SHEETS, GRAY GOODS PACE COTTON MARKET

A definite strengthening is apparent in the cotton goods market following a sharp pick-up in sheet and pillow-case activity and the increased business in gray print cloths and broadcloths. A gradually improving business also is noted in finished staple cottons, with an acceleration of activity anticipated in the future. The primary reason given for the improved tone of the market is a widening belief that prices have reached bottom and, in fact, that a turning has occurred. Price increases have already been noted in basic gray cottons and sheets and pillowcases; with even further increases predicted by some on the latter type.

Daily News Record, July 21, 1949, p. 1

### BAGS: COTTON AND PAPER PRICES SAME AS LAST MONTH; BURLAP PRICE HIGHER

Cotton and paper bags sold for the same price as last month, while the burlap bag price rose \$12.55 per thousand. The net cost for using new cotton bags was \$101.00 per thousand; burlap, \$116.80 per thousand; and paper, \$93.70 per thousand.

Table 4.- Mid-month prices of 100 pound flour bags

(Dollars per thousand)				
	July 1949	June 1949	May 1949	July 1948
<u>Prices, new, St. Louis 1/</u>				
Cotton.....	221.00	221.00	227.75	233.15
Burlap.....	206.80	194.25	197.20	211.55
Paper.....	98.70	98.70	108.75	108.65
<u>Prices, second-hand, New York</u>				
Cotton, once-used 2/.....	120.00	120.00	130.00	140.00
Cotton, bakery run 3/.....	80.00	90.00	100.00	105.00
Burlap, once-used 2/.....	90.00	85.00	100.00	4/
Burlap, bakery run 3/.....	100.00	100.00	100.00	100.00
Paper, bakery run 3/.....	5.00	5.00	10.00	10.00
<u>Difference</u>				
Cotton, new minus once-used.....	101.00	101.00	97.75	93.15
Cotton, new minus bakery run.....	141.00	131.00	127.75	128.15
Burlap, new minus once-used.....	116.80	109.25	197.20	4/
Burlap, new minus bakery run.....	106.80	94.25	197.20	111.55
Paper, new minus bakery run.....	93.70	93.70	98.75	98.65

1/ Cotton, 37" 4.00 yd. sheeting cut 43" unprinted; burlap, 36" 10 oz. cut 43" unprinted; paper, 18 x 4-1/2 x 36-3/4" unprinted; all l. c. l. shipments. No allowance made for quantity or cash discounts. From a large bag manufacturer.

2/ From a large second-hand bag dealer.

3/ From Daily Mill Stock Reporter.

4/ No data available.



# TIRE CORD: PRICES CUT TO MEET RAYON FIBER THREAT

Standard cotton tire cord prices were reduced drastically in the late part of June as producers prepared to meet the strong competition from synthetic fiber cords which are slowly expanding in the light passenger tire field. The K.P. standard 12/3/3 cord was cut from 78¢ a pound, net, mill, no freight, to 68-1/2¢, and the K.P. standard 12/4/2 number, priced on the same terms, went down from 72¢ to 67-1/2¢. Rayon tire cord, 1650, 2-ply, is currently priced at 64-1/2¢ a pound, prepaid. Manufacturers of the cotton cords were hopeful that the new prices would improve a market which has been unsettled recently.

Journal of Commerce, July 5, 1949, p. 17.

# TIRE FABRIC: COTTON TIRE FABRIC PRICE DROPS; RAYON PRICE UNCHANGED

Cotton tire fabric prices were reduced by 4.5 cents per pound and 4 cents per yard during June, while the price of rayon fabrics were unchanged.

Table 5.- Prices of cotton and rayon tire fabric, July 1 and June 1, 1949

Fabric	Cord	Fabric weight : per sq.yd.	Price per pound		Price per sq. yd.	
			July 1	June 1	July 1	June 1
		Pounds	Cents	Cents	Cents	Cents
Passenger car tires						
Cotton fabric.....	12/4/2	.86	67.5	72	58	62
Rayon fabric.....	1650/2	.67	64.5	65	43	44
Truck tires						
Rayon fabric.....	1100/2	.54	67	67	36	36
Rayon fabric.....	2200/2	.81	63	63	51	51

Based on reports from independent rubber companies.

# TIRE CORD: SPECIFIC GRAVITY AND PHYSICAL PROPERTIES OF TIRE CORD GIVEN

According to J. E. McCarty, manager of truck and passenger tire design of Goodyear Tire and Rubber Company, Akron, Ohio, the specific gravity and physical properties of various types of tire cord are as follows:

## Specific gravity of cords used in tires

Nylon.....	1.14
Viscose rayon.....	1.53
Cotton.....	1.55
Wire.....	7.80
Ramie.....	1.51
Glass.....	2.54

## Physical properties of tire cords

	Cotton	Rayon	Nylon	Ramie	Wire	Fiberglass
Cord construction:	12/4/2	1100/2	1650/2	2200/2	210/4/2	8/3/2 : .0058"/3/7 : 314/4/2
Tensile strength..	20.25	17.72	24.4	35.8	26.0	12.0 : 165 lb. : 27 lb.
Elong. at 10 lbs.:	6.9	4.5	4.2	3.0	12.1	8.3 : - : -
Ultimate elong....	11.5	10.5	12.2	10.4	22.6	9.2 : 2.0 : 3.3
Cord gauge.....	.034	.022	.027	.031	.020	.034 : .034 : -
G/Denier-cord....	1.87	2.65	2.61	2.70	6.28	1.25 : - : 4.79
G/Denier-yarn....	1.75	4.10	4.02	3.75	7.57	1.78 : - : 6.60
Test conditions..	76°F.	Oven	Oven	Oven	76°F.	76°F. : - : 76°F.
	@55 RH: dry	dry	dry	dry	@55 RH	@ 55 RH : @ 55 RH

From the American Wool and Cotton Reporter, July 14, 1949, p.77.



# CONSUMPTION OF COTTON, RAYON, AND WOOL LOWER IN 1949

Consumption of cotton, rayon, and wool in each of the first six months of 1949 was considerably below the average monthly consumption for each of these fibers in 1948. During April 1949, wool consumption was 43 percent lower than the average monthly wool consumption in 1948, as compared to 25 percent lower for cotton and 39 percent lower for rayon. During June 1949, cotton was 25 percent and rayon 26 percent lower than the monthly average for 1948.

Table 6.- Consumption of cotton, rayon, and wool, United States, monthly averages for 1948 and by months 1949.

	:Cotton 1/	: Rayon 2/	: Wool 3/	::	Cotton	: Rayon	: Wool
	: 1,000	: Million	: Million	::			
	: Bales	: pounds	: pounds	::	Index	: Index	: Index
	:	:	:	::	:	:	:
1948, monthly average:	796.3	: 91.7	: 57.8	::	100	: 100	: 100
1949, January.....:	674.5	: 87.6	: 46.5	::	85	: 96	: 80
1949, February.....:	640.2	: 78.2	: 43.3	::	80	: 85	: 75
1949, March.....:	720.9	: 64.8	: 47.7	::	91	: 71	: 83
1949, April.....:	597.0	: 55.9	: 33.0	::	75	: 61	: 57
1949, May.....:	580.1	: 58.3	: 4/	::	73	: 64	: 4/
1949, June.....:	600.5	: 67.6	: 4/	::	75	: 74	: 4/
	:	:	:	::	:	:	:

1/ From Bureau of Census reports.

2/ From Rayon Organon.

3/ From Facts for Industry "Wool Manufactures" Bureau of Census, Includes both apparel and carpet wool.

4/ No data available.

## COMPETITIVE PRODUCTS

### CASEIN FIBER: RUBBERSET COMPANY PRODUCING NEW FIBER

The Rubberset company of Newark, N. J. is currently producing a new casein fiber under the trade name "Caslen", in monofilament and coarse staple. Originally, the fiber was developed to be used as a paint brush bristle, but has now been spun from 145 to 1330 denier. As a monofilament, it has potential uses as a substitute for horsehair in fabrics and is currently being used to replace hair in mattresses. It is also being suggested for blends with wool and rayon staple. The new fiber has a tensile strength of 0.8 to 1.0 grams per denier, an elongation of 20-25 percent and a specific gravity of 1.29. It is attacked by mildew and moths, uses the same dyes as wool; is insoluble in organic solvents, burns very slowly, has a regain of 10-12 percent and elastic recovery similar to wool. The fiber is produced in straight or curled condition and is not thermoplastic.

Rayon and Synthetic Textiles, July 1949, p.71.

### FIBER V: DU PONT SEEN READY TO DEVELOP NEW FIBER

The reported decision of DuPont to go ahead with the production of this fiber and its textile development is taken to mean that the company feels its characteristics offer possibilities for some textile uses not filled in some manner by present fibers. Limited experimental quantities of the fiber in 40, 70, and 210 denier sizes are being produced now, and it will be increased. But it is not known just how far in the future commercial production is. It is possible to make Fiber V in nylon plants. Fiber V is understood to be a polyester derived essentially from terephthalic acid ethylene glycol.

Work with new fibers at DuPont has revealed that each of the new Fiber V fibers



has certain specific characteristics which make it desirable in certain fields. One of the characteristics of Fiber V is its resistance to stretching. Prospective end uses for fabrics made with Fiber V are in the industrial field. Because the dyeing problem has not been completely solved, apparel uses are believed to lie farther in the future. Both the dry and wet stretch resistance are reported to be high, exceeding nylon, and the properties of the fiber are not significantly affected by moisture. The high stretch resistance is seen in the market as fitting for uses like fish lines and sewing thread, while the resistance to high heat would be useful in other industrial applications. Spun versions of Fiber V can be made with a high resemblance to some of the desirable tactile qualities of wool. Fiber V dries faster than nylon, and has greater dimensional stability under humid conditions, which may be favorable for its use in tricot fabrics and woven dress fabrics. Wrinkle resistance may be better than nylon, and stains probably will be easily removed. The 40-denier size would probably be used in the tricot trade for lingerie fabrics, while 70-denier would be tried out in sewing thread, curtains, and shirtings. The 210 denier size presumably would be used for industrial applications.

Daily News Record, June 24, 1949, p. 23.

#### NYLON: METHOD FOR DETERMINING TWIST OFFERED

A new test method for accurately determining twist in 15 denier and other monofilament nylon yarns has been developed, the United States Testing Company announced recently. The new method utilizes a new type of take-up device built by the company's instrument division. Twist tests on monofilament nylon are difficult, if not impossible, to make accurately using conventional twist testers. Representatives of industry requested the company to develop an accurate method in view of current interest in twisted monofilament nylon for hosiery and other applications. This new service is available to throwsters, hosiery manufacturers, and other segments of the textile industry interested in twisted monofilament nylon.

Journal of Commerce, July 15, 1949, p. 11.

#### RAYON: EASTMAN OFFERS SPUN-DYED STAPLE

The development of estron (cellulose acetate) staple in a limited range of exceedingly light fast, gas fast, and wash fast colors was announced recently by Tennessee Eastman Corp. The new colored staple is produced by the addition of coloring agents to the cellulose acetate solution before it is spun into fiber. Its colors are said to be greatly superior in all fastness properties to the best dyeing commercially obtainable on cellulose acetate fiber. Of special importance is the immunity of colors to gas or fume fading. First use of the solution-dyed estron staple is expected to be in men's suiting fabrics for which purpose the fiber will be supplied in four basic colors: Navy blue, brown, gray, and black. Samples of the best color staple have been submitted to the wool and worsted trade for evaluation and the tests thus far indicate that this proved textile fiber far surpasses present fastness standards for men's outerwear.

Journal of Commerce, July 20, 1949, p. 12.

#### RAYON: WORLD PRODUCTION UP IN 1948

World rayon production was 2.5 billion pounds during 1948, as compared to 2.0 billion pounds during 1947; 1.4 billion pounds during 1945; and 2.2 billion pounds during 1939. The United States produced 45 percent, 48 percent, 57 percent, and 17 percent of the world's rayon production for the same years. This country produced a smaller portion of the world's rayon output prior to the war, but during the last two years the United States produced 45 to 48 percent of



the world's rayon production.

Table 7.- World rayon production by leading countries for specified years

Countries	1948	1947	1945	1939
	Million pounds	Million pounds	Million pounds	Million pounds
TOTAL WORLD PRODUCTION.....	2,477.5	2,012.1	1,397.8	2,239.6
United States.....	1,124.3	975.1	792.0	379.9
Germany.....	233.3	106.4	190.0	601.0
United Kingdom.....	228.1	198.9	135.2	167.4
France.....	162.2	124.3	49.4	71.7
Italy.....	144.5	163.1	7.4	308.6
Russia.....	75.0	37.0	5.0	28.0
Japan.....	71.0	35.6	27.5	539.8
Other.....	439.1	371.7	191.3	143.2
Europe.....	351.2	297.9	133.2	107.7
North America.....	43.8	31.6	22.6	14.2
South America.....	43.0	41.6	34.9	20.7
Africa and Asia.....	1.1	.6	.6	.6

Rayon Organon, June 1949, p. 88.

# WOOL: PACIFIC MILLS ANNOUNCES DEVELOPMENT OF NEW PROCESS FOR STABILIZING WOOL FABRICS

Pacific Mills has developed a new process for stabilizing all-wool fabrics. The stabilized process is roughly comparable to Paci-fixed, except that it aims to protect the fabric during dry or wet cleaning rather than in washing. It can be applied either to woolens or worsteds. The three fabrics now treated with the new process are 10 1/2 - 11-ounce worsted gabardine, an 9-9 1/2-ounce worsted flannel, and a 8-8 1/2-ounce woolen-worsted crepe. Pacific Mills claims the following features for the stabilized process; (1) Sustained attractiveness with the fresh appearance being retained for the life of the garment despite the number of cleanings; (2) wrinkle resistance; (3) stain resistance with easier stain removal, because stains do not penetrate so easily; (4) stabilized size with treated goods retaining size either in ordinary dry cleaning or in the wet cleaning process sometimes called "French dry cleaning;" (5) single responsibility with fabrics developed and produced from raw wool to finished goods under single responsibility. Pacific Mills said it would not license other mills to use its process.

Daily News Record, July 21, 1949, p.7.

# WOOL: CONSUMPTION DOWN 31 PERCENT FROM FIRST FOUR MONTHS OF 1948

Consumption of raw wool, on a scoured basis, was 170.5 million pounds for the first four months of 1949, as compared to 247.7 million pounds for the same period one year ago. This was a decline of 31 percent.



Table 8.- Consumption of wool of the sheep, United States, 1/  
January-April, 1948 and 1949

	: January-April	: January-April	: Change since
	: 1949	: 1948	: last year
	: Million	: Million	:
	: pounds	: pounds	: Percent
TOTAL.....	170.5	247.7	-31.2
Apparel.....	106.5	178.9	-40.5
Woolen system..	39.7	61.2	-35.1
Worsted system.....	66.8	117.7	-43.2
Carpet class-foreign .....	64.0	68.0	- 5.9
Woolen system.....	62.3	66.3	- 5.2
Worsted system.....	1.2	2.5	-52.0

1/ Scoured basis

Journal of Commerce, June 23, 1949, p.13.

#### TEXTILE RESEARCH AND EDUCATION

##### SINGLE-FIBER MILL GOING OUT: DIFFERENT APPROACH FOR TRAINING TEXTILE STUDENTS NEEDED

According to Edward R. Schwarz, a professor at the Massachusetts Institute, the trend to the all-fiber mill and the increasing use of fundamental research to solve the age-old problems of textile manufacture require an entirely new approach in the training of textile students. He further states, "We must organize our courses in terms of basic operations regardless of the fiber, and discard the machine by machine approach now used in textile schools. We must stop teaching machines and teach the fundamental how and why of each type of operation, such as drafting, no matter which type of machine is used to accomplish it." "In the training of research men we must develop men capable of presenting their results effectively and convincingly. To this end, courses in psychology, English composition, and public speaking are recommended for the pure research man."

Southern Textile News, June 25, 1949, p.3.

##### DU PONT RESEARCH LAB FOR FINISHES STARTED

Recently ground was broken for a new research laboratory of the Fabrics and Finishes Department of E. I. duPont de Nemours & Company. It is being constructed in Philadelphia. Scheduled to be completed next year, the Marshall Laboratory will cost \$2,000,000 to build and will employ 80 technical workers and about 100 others. The building project is aimed at increasing and improving research facilities to develop better protective coatings for industry, the home, and the farm.

Journal of Commerce, July 13, 1949, p. 14.



# OILSEEDS AND RELATED PRODUCTS

## PRODUCTION AND EXPORT OF EDIBLE OILS INCREASE: IMPORTS DECLINE

The chief production increases in fats and oils over a year earlier have been in cottonseed oil, soybean oil, butter, and lard. Total output from domestic materials in October 1948-April 1949 was about 6,950 million pounds as compared with about 6,300 million pounds a year earlier. Exports of fats, oils, and oil equivalent of oilseeds in January-April 1949 totaled 845 million pounds, including shipments to United States territories. This was more than double the total for the same period last year. Exports in April alone totaled 329 million pounds in terms of oil. Imports of fats, oils, and oil equivalent of oilseeds in January-April 1949 were 313 million pounds, 169 million pounds less than a year before. Most of the decrease was in copra.

Fats and Oils Situation, June 1949, p. 1.

## VEGETABLE OIL AND MEAL PRICES ADVANCE IN JULY

Most of the increases that occurred in prices of vegetable oils from April to May were lost in June. Prices of cottonseed, soybean, corn, and peanut oils in June declined below the April level and were the lowest since May 1941. As of mid-July peanut and tung oils had regained their June losses and were quoted higher than the May averages. Gains were also recorded for corn and coconut oils. Prices of oilseed meals generally declined from May to early June, then advanced in the last part of the month. Prices of most feeds in June were 20 to 40 percent lower than a year earlier. However, substantial increases in mid-July more than made up for the losses in June in all but coconut and linseed meal. (Table 9).

Table 9.- Prices of vegetable oils and meals

	: July 1949	: June 1949	11/ May 1949	: July 1948	: Sept. 1946
OILS 1/	: July 18	:	Cents per pound	:	:
Cottonseed oil.....	10.0	: 10.0	: 11.2	: 27.5	: 12.5
Peanut oil.....	14.5	: 11.4	: 12.9	: 27.8	: 13.0
Soybean oil.....	9.3	: 9.4	: 10.8	: 22.1	: 11.8
Corn oil.....	11.0	: 10.8	: 12.0	: 26.6	: 12.8
Coconut oil 2/.....	18.0	: 17.4	: 18.8	: 24.5	: 11.1
Linseed oil 3/.....	25.7	: 27.7	: 28.9	: 29.1	: 17.8
Tung oil 4/.....	22.5	: 21.5	: 22.2	: 23.1	: 39.0
MEALS 5/	: July 16	:	Dollars per ton	:	:
Cottonseed meal 6/:	66.00	: 57.40	: 56.20	: 82.95	: 62.75
Peanut meal 7/.....	66.00	: 55.00	: 57.20	: 80.45	: 67.25
Soybean meal 8/.....	80.75	: 73.40	: 71.00	: 96.90	: 66.00
Coconut meal 9/.....	57.00	: 59.13	: 59.40	: 92.75	: 59.70
Linseed meal 10/.....	57.50	: 54.00	: 59.00	: 72.00	: 59.25

1/ Crude, tanks, f.o.b. mills except as noted. From Oil Paint and Drug Reporter (daily quotations) and from Fats and Oils Situation, BAE (Monthly quotations).

2/ Crude, tanks, carlots, Pacific Coast. Three cents added to allow for tax on first domestic processing.

3/ Raw, drums, carlots, New York.

4/ Drums, carlots, New York.

5/ Bagged carlots, as given in Feedstuffs (daily quotation) and Feed Situation, BAE (monthly quotations).

6/ 41 percent protein, Memphis

7/ 45 percent protein, S.E. Mills.

8/ 41 percent protein, Chicago

9/ 19 percent protein, Los Angeles

10/ 32 percent protein, Minneapolis, prior to May 1947, 34 percent after that date.

11/ Preliminary.



# FATS AND OILS IMPORT CONTROLS EXTENDED UNTIL JUNE 30, 1950

Congress gave its approval to the extension of controls over fats and oils until June 30, 1950. It is believed that if the import controls were not in effect, large supplies of flaxseed and linseed oil would enter this country, thereby seriously disrupting the flaxseed price support program for this year. Officials predicted that, without the power to prohibit imports, the government might lose millions of dollars in the value of its flaxseed and linseed oil holdings in which it now has an investment of about \$225,000,000.

Oil Paint and Drug Reporter, July 4, 1949, p.4.

## COTTONSEED: AVERAGE CUT OF LINTERS AND CAKE RECOVERY PER TON OF SEED CRUSHED BELOW LAST SEASON; OIL AND HULLS UP

The cut of linters per ton of seed crushed at oil mills averaged 182 pounds net weight during the first nine months of the current season. This is below last season's average of 186 pounds, but exceeds the five-year (1937-41) average cut of 157 pounds by a wide margin. The recovery of cottonseed oil per ton of seed crushed averaged 318 pounds during the first nine months of the current season as compared with 312 pounds during the 1947-48 season. Recovery rates by states indicate that the average was higher this season than last in all states except California, Oklahoma and Texas. The recovery of cottonseed hulls averaged 462 pounds per ton of seed crushed during the August-April period of the current season compared with 452 pounds last season. The recovery rate was higher than last season in all states with the exception of California, South Carolina and Louisiana. The highest average was in Arizona with 501 pounds and the lowest in California with 365 pounds.(Table 10).

Weekly Cotton Linters Review, PMA, July 1, 1949

Table 10.- Cottonseed products produced per ton of seed crushed, by states, in Southern Laboratory Region, seasons 1947-48, 1948-49 <sup>1/</sup>

States	Oil		Cake		Hulls		Linters <sup>2/</sup>		Total	
	1947:	1948:	1947:	1948:	1947:	1948:	1947:	1948:	1947:	1948:
	Lbs.:	Lbs.:	Lbs.:	Lbs.:	Lbs.:	Lbs.:	Lbs.:	Lbs.:	Lbs.:	Lbs.:
Alabama.....	299	310	982	921	437	468	153	156	1,871	1,855
Arkansas.....	320	328	897	825	459	493	185	181	1,861	1,827
Georgia.....	300	311	925	890	472	488	189	193	1,886	1,882
Louisiana.....	305	310	928	919	467	463	158	158	1,858	1,850
Mississippi.....	322	328	927	876	449	457	180	177	1,878	1,838
Oklahoma <sup>3/</sup> .....	298	296	945	962	457	463	186	193	1,886	1,914
South Carolina.....	302	308	925	885	443	431	198	204	1,868	1,828
Texas.....	311	309	943	951	456	459	194	187	1,904	1,906
United States.....	312	318	930	898	452	462	186	182	1,880	1,860

<sup>1/</sup> Nine-month (August 1948-April 1949) period. Preliminary.

<sup>2/</sup> Net weight based on average bale weights for 1947-48 season and 22 pound tare.

<sup>3/</sup> Eight-month (August 1948-March 1949) period. Preliminary.

From: Weekly Cotton Linters Review, PMA, July 1, 1949.

## FEEDSTUFFS: LOW MOLASSES PRICE ENCOURAGES OUTPUT OF DEHYDRATED FEED

Molasses, which during the war hit a peak level of 35 cents a gallon and fell to 20 cents a year ago, now is selling around 5-1/2 cents a gallon. This low



price of molasses has stimulated production of dehydrated molasses feed pellets, according to Wallace McGehee, a manufacturer of dehydrating equipment. Mr. McGehee points to the Warriner Products Co., St. Francisville, La., as a typical development in molasses dehydration. The Warriner firm dehydrated sweetpotatoes during the war and sold a large volume to the Army. Since then, the firm has been drying and canning vegetables for human consumption and producing a dried sweetpotato meal called "Yameal" for livestock. The firm's latest development is a dehydrated mixture of cottonseed hulls and molasses, marketed at a price currently around \$45 a ton. Present production plans call for output of about 1,000 tons monthly. This product has a feeding value of around 85 percent of corn and is sold at 65 percent of the current corn price in that area. Feeding tests on cattle show that the feed can supply about 25 percent of daily concentrate requirements.

Feedstuffs, July 2, 1949, p. 52.

#### FLAXSEED: 1949 PRICE SUPPORT DETAILS GIVEN

Formal announcement of the details of the 1949 support program for flaxseed, published by the Department of Agriculture in the Federal Register of July 7, 1949, announced that the support price for the 1949 crop will be \$3.99 a bushel basis, Minneapolis. The loans and purchase agreements under the program will be available from harvest of the crop through October 31, 1949, for the states of Arizona, California and Texas, and through January 31, 1950, for all other states. The loans will mature on demand not later than January 1, 1950, for Arizona, California and Texas, and not later than April 30, 1950, for all other states.

Oil, Paint and Drug Reporter, July 11, 1949, p. 3.

#### PALM OIL: DEVELOP PALM OIL SUBSTITUTE FOR HOT DIP TINPLATE

A synthetic substitute for African and East Indian palm oil, a vital necessity in making hot dip tinplate, has been developed at the Armour Research Foundation of the Illinois Institute of Technology. After extensive basic research on tinning oil action, the Foundation scientists selected dimerized linoleic acid (dimer acid) as having the best possibilities. This is a fatty acid product only recently available in quantity. It is made from common vegetable oils by heating them under pressure in contact with steam. From their work the Foundation scientists have concluded that satisfactory tinplate can be made with 100 percent free fatty acid, if the acid is not too volatile or viscous. This investigation was brought about due to the fact that there was no domestic source of palm oil and, up to now, no substitute was in general use. About 7,500 tons of the oil are used annually in the United States in hot dip tinning. Before the war the oil sold as low as 8 cents per pound. After the war it went as high as 40 cents. Journal of Commerce, July 15, 1949, p. 10.

#### LINTERS AND CELLULOSE

##### LINTERS: PRICES OF PURIFIED LINTERS AND DISSOLVING WOOD PULP REDUCED

The price of purified linters, which has remained unchanged since October 1948, declined approximately 4 percent in May and 3 percent in June of this year. Domestic prices for the grades of dissolving wood pulp used in rayon manufacture were reduced from 3 to 7 percent effective June 1. This reduction marks the first change in rayon pulp prices since they were increased in July 1948 (Table 11).



Table 11.- Average annual price of purified linters and dissolving wood pulp, 1946-48 and monthly quotations March-June 1949

(Cents per pound)				
	Purified linters 1/	Standard viscose grade	Wood pulp 2/ High-tenacity: viscose grade	Acetate & cupra grade
1946.....	9.50	5.60	5.85	6.15
1947.....	16.30	7.03	7.44	8.04
1948.....	11.25	7.93	8.44	9.20
1949, March.....	9.35	8.20	8.70	9.50
1949, April.....	9.35	8.20	8.70	9.50
1949, May.....	9.00	8.20	8.70	9.50
1949, June.....	8.70	7.95	8.40	8.90

1/ Weighted averages, 1946-47. On 7 percent moisture basis, f.o.b. pulp plant. Average freight to users is 0.5 percent per pound. Prices supplied by a producer.

2/ Average of average monthly prices, 1946-47. Compiled from Rayon Organon and from letters to us from producers. Wood pulp prices are on a 10 percent moisture basis, f.o.b. domestic producing mill, full-freight and 3 percent transportation tax allowed, December 1, 1947, on; freight equalized with that of Atlantic or Gulf port carrying lowest backhaul rate to destination plus 3 percent backhaul charges, prior to December 1.

#### LINTERS: PRODUCTION AND CONSUMPTION DECLINE; PRICES RELATIVELY STABLE

Production of cotton linters in May dropped to 80 thousand bales, the lowest monthly production since August 1948. Linters consumed during the month of June amounted to 122 thousand bales, as compared with 126.4 thousand bales for May, a decrease of about 3 percent. Stocks of linters in consuming establishments, public storage and warehouses, and oil mills on May 31, 1949 amounted to 589 thousand bales, 28 percent larger than a year ago. The price of Grade 2 cotton linters averaged 7.84 cents per pound in June, which was the same as in May, but substantially below the June 1948 average of 9.82 cents. The June average for Grade 4 linters remained unchanged, but was approximately 42 percent below the June 1948 price of 7.51 cents. Grade 6 linters averaged 2.57 cents in June, as compared with 2.75 cents in the previous month and 5.84 in June a year ago. (Table 11).

#### LUPINE: SATISFACTORY METHOD FOR DRYING LUPINE SEED REPORTED

A satisfactory method of drying lupine seed with air dehydrated by passing it over calcium chloride has been devised by J. W. Simmons, USDA agricultural engineer and research professor of agricultural engineering of Georgia. This method would also apply to the farm drying of other seed. Details of the method used can be had by writing to Press Service, USDA, Office of Information, Department of Agriculture, Washington 25, D. C., and asking for No. 1029.

USDA, June 20, 1949.



Table 11.- Cotton linters: Production, consumption by industries, stocks, and prices, United States, for specified months

	June	May	April	March	June
	1949	1949	1949	1949	1948
	1,000	1,000	1,000	1,000	1,000
	Bales	Bales	Bales	Bales	Bales
Production 1/.....	4/	80.0	99.0	144.0	36.0
Consumption 2/.....	122.0	126.4	120.0	134.0	94.8
Quantity bleached.....	72.1	79.8	73.3	83.8	55.0
Other industries.....	49.9	46.6	46.7	50.2	39.8
Stocks 3/ .....	4/	589.0	660.0	682.0	403.0
Prices	Cents	Cents	Cents	Cents	Cents
No. 2 grade, per lb.....	7.84	7.84	7.87	7.72	9.82
No. 4 grade, per lb.....	4.32	4.32	4.30	4.08	7.51
No. 6 grade, per lb.....	2.57	2.75	2.82	2.74	5.84

1/ From Weekly Cotton Linters Review, PMA, Cotton Branch, USDA.

2/ From Facts for Industry, Cotton and Linters, Bureau of the Census.

3/ Total stocks in consuming establishments, public storage and warehouses, and oil mills. Stocks at end of the month. From Facts for Industry, Cotton and Linters, Bureau of the Census.

4/ Data not available.

#### PYRETHRUM: IMPORTS IMPROVE PYRETHRUM SUPPLY

Shipments this year may double 1948 to meet higher demand. The supply outlook seems favorable as continued good dry weather in Kenya Colony and Tanganyika should increase the output there and allow for a heavier import here. Prices will probably climb upward by about 15 percent, one supplier predicted. Imports of pyrethrum this year should be well over 7 million pounds. In the late years of World War II the largest imports arrived in this country, reaching its peak in 1946 with a total of 20,475,967 pounds. In 1947, imports sagged to 8,082,035 pounds and last year dipped to 3,633,158. The commercial yield from a new strain of seed should result, in the latter part of this year and 1950, in increased values for pyrethrins, a content of 2 percent and higher being expected.

Journal of Commerce, June 27, 1949, p. 11.

#### PENICK NOW MAKING SYNTHETIC PYRETHRUMS

S. B. Penick and Co., New York, has commenced production of synthetic pyrethrums in limited quantities at its Jersey City, New Jersey laboratory. Following a process developed by the Bureau of Entomology and Plant Quarantine, Department of Agriculture, the company's technicians are producing a synthetic referred to as the allyl homolog of cinerin I. Preliminary tests on flies indicate the synthetic material to be equal in toxicity to the natural, but further technical work remains to be done, according to Harold Noble, Vice President of the firm.

Oil Paint and Drug Reporter, July 4, 1949, p. 5.

#### DURABLE STARCH SOLD IN BRITAIN

Absolute stiffness retention even after a number of washings is claimed for a new product, known as "Dip", recently introduced by British Permanent Starch Co., Ltd. The use of resins as textile stiffening agents is not new, but a claim



for absolute stiffness retention is believed to be so. "Dip" is said to be milky white in appearance, non-solvent, and is unaffected by oxidation. A film of unusual hardness is produced which confers a high degree of firmness to textiles, thereby improving their draping qualities, the company states. A further claim is that "Dip" processing renders fabrics more shrink- and crease-resistant, together with inexpensiveness and simple application. The degree of stiffness can be easily regulated and controlled through the dilution ratio with water, and can, therefore, be used to treat a great variety of articles. Since it is non-flammable, non-toxic and harmless to the skin, no storage precautions need be taken.

Daily News Record, July 13, 1949, p.21.

#### SWEETPOTATO PRICE PROPS REDUCED 25 to 50 CENTS

The Department of Agriculture announced that it will support grower prices of 1949-crop sweetpotatoes at rates ranging from \$1 to \$1.50 a bushel to November 15 and \$1.50 to \$2.00 thereafter, depending on varieties. These rates, which are for number one grade, range from 25 to 50 cents a bushel below last year's support levels.

Daily Mill Stock Reporter, July 14, 1949, p. 5.

#### NEW BUSH-TYPE SWEETPOTATO DEVELOPED

A new variety of sweetpotato, commonly called the Murff bush Porto Rican, but officially tagged the Texas 51, has been developed. It is claimed that this variety will mean as much to the sweet potato industry as hybrid corn did to the Corn Belt. The Texas 51 grown upright, like a peanut plant, has a vine only a foot long as compared with about 10 feet for ordinary sweetpotatoes, and can be cultivated up to the date of harvest. It is a yam type, having the juicy yellow meat preferred in the South and Midwest, and will grow anywhere sweetpotatoes grow. So far, it has outyielded other varieties 50 percent to 100 percent; returned a more uniform crop (fewer jumbos, strings, and culls); produced non-stringy, high-quality meat; simplified harvesting (no trailing vines to clog harvester, and if vines are saved for feed, they can be cut with a mower.) Last year the new variety yielded 414 bushels, with only 200 pounds per acre of plant food. Other varieties need 600 to 1,000 pounds per acre.

Chemurgic Digest, June 1949, p. 4.



